Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:
Listing of Claims:

1. (currently amended) A method for inducing promotion of neural cell differentiation of target cells comprising contacting said target cells for a suitable period of time with an effective amount of a compound of the general Formula I

wherein

Y is $-(CH_2)_m$ -, -CH(OH)- or -C(=O)- and m is $[[0-3]]_{\underline{1-3}}$; X is H, alkyl, $-CH_2OH$ -, CH_2Oacyl or $-CH_2acyl$; and R is H, a cation, alkyl or optionally substituted aryl+ $\underline{provided\ that\ when\ Y\ is\ -(CH_2)_m}$ -, $\underline{m=0}$, and R is H or cation, X is not $\underline{CH_2Oacyl}$.

2. (original) A method for promoting neural activity in an individual comprising administering to the



individual in need an effective amount of a compound of the general Formula I of Claim 1.

- 3. (previously presented) A method according to Claim 2, wherein said neural activity is selected from the group consisting of promotion of neuronal outgrowth, promotion of nerve growth, provision of dopaminotrophic supporting environment in a diseased portion of the brain and nerve rescue.
- 4. (previously presented) A method for the treatment of disorders and diseases which can be treated by promoting neural cell differentiation and/or neural activity comprising administering to a person in need a therapeutically effective amount of a compound of Formula I of Claim 1.
- 5. (previously presented) A method according to
 Claim 4, wherein said disorders and diseases are mental
 disorders or diseases which are at least one of dementia
 mental disorders and neuro-degenerative disorders or diseases.
- 6. (currently amended) A method according to Claim
 4, wherein said mental disorder or disease is schizophrenia—or

 dementia.

7. (original) A method according to Claim 4, wherein said disorders and diseases are neurodegenerative disorders or diseases.

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8. (currently amended) A method according to claim

1 wherein the compound of formula I is selected from the group

consisting of

i. 1,3 cyclic glycerophosphate;

ii. 1,2 cyclic glycerophosphate;

iii_ii. phenyl 1,3 cyclic glycerophosphate;

iv. phenyl 1,2 cyclic glycerophosphate;

wiii. 1,3 cyclic propanediol phosphate;

vi. 1,2 cyclic propanediol phosphate;

viiiv. phenyl 1,3 cyclic propanediol phosphate;

viii. phenyl 1,2 cyclic propanediol phosphate;

ixv. cyclic dihydroxyacetone phosphate; and

*vi. phenyl cyclic dihydroxyacetone phosphate.

9-16. (canceled)

17. (currently amended) A method for promoting neural activity in an individual comprising administering to the individual in need an effective amount of a compound of the general formula I

wherein

Y is $-(CH_2)_{m^-}$, -CH(OH) - or -C(=O) - and m is $[[0-3;1]_{1-3;}$ X is H, alkyl, $-CH_2OH$ -, CH_2Oacyl or $-CH_2acyl$; and R is H, a cation, alkyl or optionally substituted aryl; provided that when Y is $-(CH_2)_m$, m=0, and R is H or cation, X is not $-CH_2Oacyl$;

wherein said neuronal activity is selected from the group consisting of promotion of neuronal outgrowth, promotion of nerve growth, provision of dopaminotrophic supporting environment in a diseased portion of the brain and nerve rescue.

18. (currently amended) A method for the treatment of disorders and diseases, other than dementia, which can be treated by promoting neural cell differentiation and/or neural activity, the method comprising administering to a person in need a therapeutically effective amount of a compound of Formula I

On but

wherein

Y is $-(CH2)_m$ -, -CH)OH)- or -C(=O)-, and m is [[0-3]] = 1-3; X is H, alkyl, $-CH_2OH$ -, CH_2Oacyl or $-CH_2acyl$; and

- 19. (original) A method according to claim 18, wherein said disorders and diseases are mental disorders or diseases.
- 20. (previously presented) A method according to claim 18, wherein said mental disorder or disease is schizophrenia.
- 21. (previously presented) A method according to Claim 18 , wherein said mental disorder is a learning disability.

- 22. (original) A method according to claim 18, wherein said disorders and diseases are neurodegenerative disorders or diseases.
- 23. (previously presented) A method according to Claim 18, wherein said neurodegenerative disorder or disease is Alzheimer's disease or Parkinson's disease.
- 24. (previously presented) A method according to Claim 18, wherein said disorders or diseases result from exposure of an individual to harmful environmental factors or from a mechanical injury.
- 25. (previously presented) A method according to Claim 18, for the treatment of nerve rescue after nerve injury.
- 26. (currently amended) A method according to claim 18 where the general formula I is selected from the group consisting of
- i. 1,3 cyclic glycerophosphate;
- ii. 1,2-cyclic-glycerophosphate;
- iii phenyl 1,3 cyclic glycerophosphate-P;
- iv. phenyl 1,2 cyclic glycerophosphate;
- $\forall iii$. 1,3 cyclic propanediol phosphate;
- vi. 1,2-cyclic propanediol phosphate;

viiiv. phenyl 1,3 cyclic propanediol phosphate;
viii. phenyl 1,2 cyclic propanediol phosphate;
ixv. cyclic dihydroxyacetone phosphate; and
xvi. phenyl cyclic dihydroxyacetone phosphate.
27-36. (canceled)

37 (new): A method according to claim 4, wherein said mental disorder or disease is dementia.